

the low tension needed to operate the automotive electric system of 24V and so on.

18. (Amended) A generator constructed as defined in claim 15, wherein the controller unit connects all the winding sets in series to ensure the maximum high tension, connects any of the winding sets in series to ensure any tension less than the maximum high tension and further connects all the winding sets in parallel to produce the minimum tension.

✓ **IN THE ABSTRACT**

Please replace the present Abstract with a substitute Abstract that is attached hereto on a separate sheet.

✓ **PRIORITY CLAIM**

Submitted herewith are a certified copy and a certified translation of priority application No. 293650/2000, filed on September 27, 2000. The previous priority claim is repeated.

REMARKS

The Examiner's action dated August 13, 2002, has been received, and its contents carefully noted.

In response to the objections and formal rejections presented on pages 2 and 3 of the action, a substitute Abstract and substitute specification are submitted herewith, and claims 1, 7, 16 and 17 have been amended to eliminate the informalities noted by the Examiner.

With regard to the formal rejection presented in section 5 of the action, it was noted that the term "shunt", when referring to "windings", was the result of an erroneous

translation. The correct translation of the original term is "distributed". This correction is included in the substitute specification and in the amended claims.

With regard to the formal rejection presented in section 6 of the action, it was intended to refer to low tension and high tension, rather than low power and high power. In a generator according to the invention, one set of winding generates a relatively low tension, or voltage, while another set generates a relatively high tension, or voltage. This is disclosed, for example, in the original specification on pages 12 and 13.

Finally, claims 19-21 have been cancelled. ✓

Accordingly, it is requested that the objections and the formal rejections be reconsidered and withdrawn.

All of the prior art rejections directed to claims 1-11 are traversed for the reason that the applied reference, or primary applied reference, the U.S. patent to Nishmura, is not available as prior art against the claims of the present application. This reference has a U.S. filing date of November 14, 2000. The present application claims priority rights for an application filed in Japan on September 27, 2000. A comparison of the enclosed translation of that priority application with the present specification will reveal that the entire disclosure of the priority application is found in the present specification and all of the drawing of the priority application correspond to figures 1-9 of the present application. Claims 1-11 of the present application are fully disclosed in this priority application.

An attachment to the declaration filed in connection with the present application identifies an earlier Japanese application filed on April 14, 2000. That earlier application

does not disclose the subject matter of claim 1 of the present application.

Under these circumstances, applicants are entitled to rely on the priority date of the application filed September 27, 2000, for claim 1 and the claims dependent therefrom. In this connection, attention is directed to MPEP, section 201.13F. Accordingly, is requested that the prior art rejection of claims 1-11 be reconsidered and withdrawn.

On the other hand, the subject matter of claim 12 is disclosed in the Japanese application filed on April 14, 2000, so that claim 12 and the claims dependent therefrom are not entitled to any priority claim.

The rejections of those claims are traversed for the reason that the novel generator defined in claim 12 is not disclosed by Nishimura. Specifically, claim 12 defines a stator composed of a stator core having radially outwardly extending teeth. Such an arrangement of teeth is not disclosed by Nishimura. The radially outwardly extending teeth, which are illustrated in Figure 12 of the application drawing, form slots that are opened radially outwardly to give easier access to the slots from outside the stator core. This facilitates installation of the windings, after which the stator core with the assembled windings is pressed fitted into an outside cylinder to complete the stator.

Since such a stator arrangement is not disclosed in Nishimura, that reference cannot be considered to anticipate claim 12 or the claims dependent therefrom. Accordingly, it is requested that the prior art rejections of those claims be reconsidered and withdrawn.

In view of the above, it is requested that all of the objections and rejections of record be reconsidered and

withdrawn, that the pending claims be allowed and that the application be found in allowable condition.

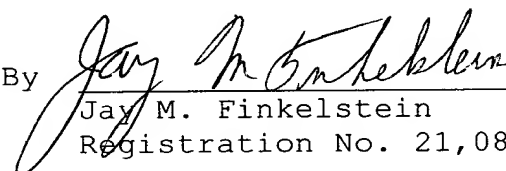
If the above amendment should not now place the application in condition for allowance, the Examiner is invited to call undersigned counsel to resolve any remaining issues.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings showing changes made.**"

Respectfully submitted,

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Amended claims-Version with markings to show changes made

1. (Amended) A generator with plural power-generation characteristics, comprising a rotor shaft supported for rotation in a stator frame, a rotor mounted against rotation on the rotor shaft, and a stator arranged around the rotor and fixed to the stator frame, wherein the stator is comprised of an inside cylinder arranged around the rotor to define an air gap between confronting surfaces of them, teeth arranged spaced circumferentially on the inside cylinder to form sequential slots, an outside cylinder surrounding around tooth tips of the teeth, ~~more than one~~ at least two systems of stator windings either concentrated-wound or ~~shunt-distributed~~-wound with a preselected slot span, one of which is low power windings each containing a small number of turns while another of which is high power windings each containing a large number of turns, and terminal lines having terminals connected to any preselected low power and high power windings.

7. (Amended) A generator constructed as defined in claim 1, wherein the stator windings concentrated-wound or ~~shunt-distributed~~-wound around a field pole corresponding to any pole of the rotor are shunt from series connections into parallel connections as an rpm of the rotor increases, thus regulating a generated voltage.

12. (Amended) A generator with diverse power-generation characteristics, comprising a rotor supported for rotation in a stator frame and having mounted with permanent magnets of multiple poles, and a stator arranged around the rotor and fixed to the stator frame, wherein the stator is composed of a stator core having

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radially outwardly extending teeth arranged spaced
circumferentially about the stator core to form
sequential slots and confronting an outer periphery of
the rotor to define an air gap between them, and ~~more~~
~~than one~~ at least two windings wound spanning across the
slots, the windings being each grouped into ~~three~~ at least
two winding sets that are divided circumferentially with
a slot span on the stator core to be independent of one
another, the windings belonging to each winding set being
wound displaced in slot circumferentially 120 electrical
degrees apart to form a three-phase system of windings,
and wherein terminals are distributed uniformly over an
inside circumference of the stator such that the windings
in a 2nd winding set are arranged in the stator slots so
as to overlap with a 1st winding set in waveform of emf,
while a 3rd winding set overlaps with the 1st set and the
2nd set in waveform of emf, and a controller unit .
changes for changing over connections to vary the number
of turns in the windings connected in series to of the
terminals in every winding sets, thus thereby giving any
electric power varied in at different voltages.

16. (Amended) A generator constructed as defined in claim
12, wherein terminals of the windings in the winding sets
are selectively connected in either series and/or
parallel by the controller unit, whereby a low tension
induced in the windings of the winding sets is
consumed applied to in automotive electric systems,
whereas a high tension is consumed applied to either
energize the heaters incorporated in diesel particulate
filters ~~and so on~~ equipped on automotive vehicles ~~and/or~~
to or drive ~~the~~ auxiliaries mounted on the vehicles.

17.(Amended) A generator constructed as defined in claim 12, wherein the windings for high tension are divided into three winding sets ~~and shunt-wound~~, the terminals of the windings are selectively connected either in series and/or in parallel by the controller unit, and the windings for low tension are ~~concentrated-wound~~ in a continued over the whole periphery of the stator to produce the low tension needed to operate the automotive electric system of 24V and so on.

18.(Amended) A generator constructed as defined in claim 15, wherein the controller unit connects all the ~~concentrated-wound~~ winding sets in series to ensure the maximum high tension, connects any of the ~~concentrated-wound~~ windings sets in series to ensure any tension less than the maximum high tension and further connects all the ~~concentrated-wound~~ windings sets in parallel to produce the minimum tension.

Version with markings to show changes made

Abstract of the Disclosure

A generator ~~is disclosed,~~ in which connections among winding sets are changed to produce diverse powers different in voltage. ~~A stator is composed of a stator core with teeth to form sequential slots, and many windings wound in the slots. The windings~~ Windings are grouped circumferentially in slots into winding sets, which are wound spaced circumferentially 120 electrical degrees apart to provide a three-phase system of windings. Any one winding set ~~serves producing~~ produces a low ~~tension~~ voltage applied to an automotive electrical system. A controller unit ~~makes terminals of the~~ connects windings in other winding sets ~~connect~~ in series and/or in parallel thereby producing powers different in voltage. As an alternative, the stator is ~~comprised~~ composed of an inside cylinder forming one surface of an air gap, a circular toothed member having teeth arranged circumferentially on the inside cylinder to form sequential slots opened radially outwardly of the stator, and an outside cylinder prepared separately from the toothed member ~~then, followed by~~ and then fit over the toothed member.